Massachusetts Department of Public Health (MDPH)
Radiation Control Program (RCP)
Information Sheet on Potassium Iodide (KI)

There has been a lot of discussion over the past few years at the Federal, State and Local level on the issue of potassium iodide (KI) for the public in the event of an accident or incident at commercial nuclear power plants. Recent concerns over terrorism threats have added further emphasis to the potential need for making KI available for the general public. The purpose of this information sheet is to advise you on this issue and what the MDPH and the Massachusetts Emergency Management Agency (MEMA) are doing concerning this issue.

Potassium iodide (KI) is a U.S. Food and Drug Administration (FDA) approved over-the-counter drug that can be used to protect the thyroid gland from immediate and future radiation injury caused by radioactive iodine released during a nuclear accident.

KI saturates the thyroid gland with stable (non-radioactive) iodine, thus preventing or reducing the amount of radioactive iodine that will be taken up by the thyroid. Radiological emergencies may release radioactive iodine in the environment. Since iodine concentrates in the thyroid gland, inhalation of air or ingestion of food contaminated with radioactive iodine can lead to injury to the thyroid, including an increased risk of thyroid cancer.

It is important to note that KI is only effective against exposure to radioactive iodine and only protects the thyroid. Numerous other radionuclides may be released in an accident situation and the KI would not protect individuals from these other types of radioactivity. The primary method of protection is evacuation and sheltering and KI should be viewed as an adjunct to these primary measures.

To be most effective, KI should be taken shortly before or shortly after exposure to radioactive iodine. Even if taken three to four hours after exposure, it would still reduce radioactive iodine from being absorbed by the thyroid and still have a substantial effect. The protective effects of KI last approximately 24 hours.

Although KI is available over-the-counter, it is recommended that you discuss whether KI is right for you with your health care provider.

The Nuclear Regulatory Commission (NRC) has made KI available to the Commonwealth of Massachusetts for distribution to individuals living in Massachusetts towns within the 10-mile Emergency Planning Zones (EPZs) of the Pilgrim, Seabrook, and Vermont Yankee Nuclear Power Stations. This supply allows two pills per person in these areas and the state is arranging for pre-distribution of one pill per person and stockpiles of pills outside of the EPZs should an event occur.

The presently available KI pills are 130 milligram scored tablets. In December 2001, the U.S. Food and Drug Administration published guidance on KI recommending the following dosages:

Adults	130 mg
Children aged 3 to 18 years	65 mg
Young Children (one month to 3 years)	32 mg
Infants (Birth through one month)	16 mg

KI is also available for purchase at some pharmacies and also over the internet and through "800" telephone numbers, some of these are:

Carter-Wallace Laboratories
Thyro-Block Tablets
www.nitro-pak.com
or www.majorsurplusnsurvival.com
1-800-804-4147 or
1-800-804-4148

And

Anbex
IOSAT Tablets
www.anbex.com
1-866-463-6754